



Sequence Listing created in PatentIn.WorkFile

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<110> Suffix : Ph.D.

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<110> Suffix : Ph.D.

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<110> FirstName : Kshama
<110> MiddleInitial :
<110> Suffix : Ph.D.

Application Project

<120> Title : Hyaluronan Synthase Gene and Uses Thereof
<130> AppFileReference : 3554.011
<140> CurrentAppNumber : US 09/469,200
<141> CurrentFilingDate : 1999-12-21

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Earlier Applications

<150> PriorAppNumber : US 09/178,851

<151> PriorFilingDate : 1998-10-26

Earlier Applications

<150> PriorAppNumber : US 60/064,435

<151> PriorFilingDate : 1997-10-31

Sequence

<213> OrganismName : Streptococcus equisimilis

<400> PreSequenceString :

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ctgatagcct acctattagt caaaatgtcc ttatcctttt ttacaagcc atttaaggga   180
agggctgggc aatataaggt tgcagccatt attccctctt ataacgaaga tgctgagtca   240
ttgctagaga ccttaaaaag tgttcagcag caaacctatc ccctagcaga aatttatgtt   300
gttgacgatg gaagtgtctg tgagacaggt attaagcgca ttgaagacta tgtgcgtgac   360
actggtgacc tatcaagcaa tgcattgtt catcggtcag agaaaaatca aggaaagcgt   420
catgcacagg cctgggcctt tgaaagatca gacgctgatg tctttttgac cgttgactca   480
gatacttata tctaccctga tgccttagag gagtgttaa aaacctttaa tgaccctaact   540
gttttgctg cgacgggtca ccttaatgtc agaaatagac aaaccaatct ctaacacgc   600
ttgacagata ttcgctatga taatgctttt ggcgttgaac gagctgcca atccgttaca   660
ggtaatatcc ttgtttgctc aggtccgctt agcgtttaca gacgcgaggt ggtgttctc   720
aacatagata gatacatcaa ccagaccttc ctgggtatc ctgtaagtat tggatgatgac   780
agggtgctga ccaactatgc aactgattta ggaaagactg ttatcaatc cactgctaaa   840
tgtattacag atgttcttga caagatgtct acttacttga agcagcaaaa ccgctggaac   900
aagtctctct ttagagagtc cattatttct gtaagaaaa tcatgaacaa tccttttgta   960
gccctatgga ccatacttga ggtgtctatg ttatgatgc ttgtttatc tgtggtggat   1020
ttcttttagt gcaatgtcag agaattgat tggctcaggg ttttagcctt tctggtgatt   1080
atcttcattg ttgccctgtg tcggaacatt cattacatgc ttaagcacc gctgtccttc   1140
ttgttatctc cgtttatgg ggtgtgcat ttgtttgtcc tacagccctt gaaattatat   1200
tctcttttta ctattagaaa tgctgactgg ggaacacgta aaaaattatt ataa       1254
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<212> Type : DNA

<211> Length : 1254

SequenceName : seHAS Gene

SequenceDescription :

Custom Codon

Sequence Name : seHAS Gene

Sequence

<213> OrganismName : Streptococcus Equisimilis

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RAGQYKVA AI IPSYNEDAES LLETLSVQQ QTYPLAEIYV VDDGSADETG IKRIEDYVRD   120
TGDLSNVIV HRSEKNQGKR HAQAWAFERS DADVFLTVDS DTIYPPDALE ELLKTFNDPT   180
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VFAATGHLNV RNRQTNLLTR LTDIRYDNAF GVERAAQSVT GNILVCSGPL SVYRREV VVP 240
NIDRYINQTF LGIPVSIGDD RCLTNYATDL GKTVYQSTAK CITDVPDKMS TYLKQQNRWN 300
KSFFRESIIS VKKIMNNPFV ALWTILEVSM FMMLVYSVVD FFVGNVREFD WLRVLAFLVI 360
IFIVALCRNI HYMLKHPLSF LLSPFYGV LH LFVLQPLKLY SLFTIRNADW GTRKKLL 417

<212> Type : PRT

<211> Length : 417

SequenceName : seHAS Enzyme

SequenceDescription :

Sequence

<213> OrganismName : Synthetic

<400> PreSequenceString :

gctgatgaga caggtattaa gc 22

<212> Type : DNA

<211> Length : 22

SequenceName : primer: se1

SequenceDescription :

Custom Codon

Sequence Name : primer: se1

Sequence

<213> OrganismName : Synthetic

<400> PreSequenceString :

atcaaattct ctgacattgc 20

<212> Type : DNA

<211> Length : 20

SequenceName : primer: se2

SequenceDescription :

Custom Codon

Sequence Name : primer: se2

Sequence

<213> OrganismName : Synthetic

<400> PreSequenceString :

gactcagata cttatatcta 20

<212> Type : DNA

<211> Length : 20

SequenceName : primer: sesp1

SequenceDescription :

Custom Codon

Sequence Name : primer: sesp1

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Sequence

<213> OrganismName : Synthetic

<400> PreSequenceString :

ttttacgtg ttcccca 17

<212> Type : DNA

<211> Length : 17

SequenceName : primer: sesp2

SequenceDescription :

Custom Codon

Sequence Name : primer: sesp2

Sequence

<213> OrganismName : Paramecium bursaria chlorella virus

<400> PreSequenceString :

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flaqvlfsel nrklrkwis lrpkgwndvr laviiagyre dpymfqkcle svrdsdygnv 120
arlicvidgd edddmrmaav ykaiyndnik kpefvicesd dkegeridsd fsrdicvlqp 180
hrgkreclyt gflakmdps vnavvlidsd tvlekdaile vvyplacdpe iqavagecki 240
wntdtllsll vawryysafc versaqsffr tvqcvggplg aykidiikei kdpwisqrfl 300
gqkctygddr rltneilmrg kkvvftpfav gwsdsptnvf ryivqqtrws kswcreiwyt 360
lfaawkhgls giwlafeclly qityfflviy lfsrlavead praqtatviv sttvalikcg 420
yfsfrakdir afyfvlytfv yffcmipari tammtlwdig wgtgrgnekp svgtrvalwa 480
kqyliaymww aavvgagvys ivhnmfdown slsyrfalvg icsyivfivi vlvvyftgki 540
ttwnftklqk eliedrvlyd attnaqsv 568

<212> Type : DNA

<211> Length : 568

SequenceName : PBCV Enzyme

SequenceDescription :

Custom Codon

Sequence Name : PBCV Enzyme

Sequence

<213> OrganismName : Paramecium bursaria chlorella virus

<400> PreSequenceString :

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ctgggtatgt tctacattgg aatattgctc tctcgacaat ctggggagta tcagcttatg 180
gtattttcgt ttttgggttt ttcttgcac aagttttatt tcagaactg aacaggaaac 240
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ttgttctgtg tgagtcagac gacaaggaag gtgaacgcat cgactctgat ttctctcgcg 540
acatttctgt ctccagcct catcgaggaa aacgggagtg tctttatact gggtttcaac 600
ttgcaaagat ggacccagat gtcaatgctg tcgttctgat tgacagcgat accgttctcg 660

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agaaggatgc tattctggaa gttgtatacc cacttgcacg ccatcccgag atccaagccg  720
ttgcaggatga gtgtaagatt tggaacacag acactctttt gagtcttctc gtcgcttggc  780
gggtactatc tgcgttttgt gtggagagga gtgccagtc tttttcagg actgttcagt  840
gcgttggggg gccactgggt gcctacaaga ttgatatcat taaggagatt aaggaccct  900
ggatttccca gcgctttctt ggtcagaagt gtacttacgg tgacgaccgc cggctaacca  960
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acagtccgac caatgtgtt cggtagatcg ttcagcagac ccgctggagt aagtcgtggt 1080
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<212> Type : DNA

<211> Length : 1740

SequenceName : PBCV Gene

SequenceDescription :

Custom Codon

Sequence Name : PBCV Gene

Sequence

<213> OrganismName : Pastuerella Multocida

<400> PreSequenceString :

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gttgaatttc aaattaccaa atgcaaagaa aaactctcag cacatccttc tgtaattca 180
gcacatcttt ctgtaataa agaagaaaaa gtcaatgtt gcgtagtcc gtagatatt 240
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catgttaatg attttacatg gtacaaaaag cgaaagaaaa gacttggcat aaaacctgaa 480
catcaacatg ttggtcttcc tattatcgtt acaacattca atcgaccagc aattttatcg 540
attacattag cctgtttagt aaaccaaaaa acacattacc cgtttgaagt tatcgtgaca 600
gatgatggta gtcaggaaga tctatcaccg atcattcgcc aatatgaaaa taaattggat 660
attcgctacg tcagacaaaa agataacggt ttcaagcca gtgccgctcg gaatatggga 720
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gattcgctt tccgttttt tgcggcgggt aatgttgctt tcgctaaaaa atggctaaat 1080
aaatccggtt tctttgatga ggaatttaac cactggggtg gagaagatgt ggaatttga 1140
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catatcaata gaggaccttt agtttcaatt tatatcccag cttataactg tgcaaaactat 1380
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tgaacgatg gttcaacaga taatacctta gaagtgatca ataagcttta tggtaataat 1500
cctaggggtac gcatcatgtc taaaccaaat ggcggaatag cctcagcatc aatgcagcc 1560
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gatgcagttg aactgtgttt aaaagaattt taaaagata aaacgctagc ttgtgttat 1680
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caatttgac ttttaatctt agaaaagaaa accggccatg tatttaataa aacatcgacc 2820
ctgacttata tgccttgga acgaaaatta caatggacaa atgaacaaat tgaagtgc 2880
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<212> Type : DNA

<211> Length : 2937

SequenceName : PmHAS Gene

SequenceDescription :

Custom Codon

Sequence Name : PmHAS Gene

Sequence

<213> OrganismName : Pastuerella Multocida

<400> PreSequenceString :

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KDFPKDLVLA PLPDHVNDFT WYKKRKKRLG IKPEHQHVGL SIIVTTFNRP AILSITLACL 180
VNQKTHYPFE VIVTDDGSQE DLSPPIRQYE NKLDIRYVRQ KDNGFQASAA RNMGLRLAKY 240
DFIGLLDCDM APNPLWVHSY VAELEDDDL TIIGPRKYID TQHIDPKDFL NNASLLESLP 300
EVKTNNSVAA KEGTVSLDW RLEQFEKTEN LRLSDSPFRF FAAGNVFAK KWLNKSGFFD 360
EEFNHWGGED VEEGYRLFRY GSFFKTIDGI MAYHQEPPGK ENETDREAGK NITLDMIREK 420
VPYIYRKL L IEDSHINRVP LVSIYIPAYN CANYIQRCDV SALNQTVVDL EVCICNDGST 480
DNTLEVINKL YGNNPRVRIM SKPNGGIIASA SNAAVSFAKG YYIGQLDSDD YLEPDAVELC 540

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LKEFLKDKTL ACVYTTNRNV NPDGSLIANG YNWPEFSREK LTTAMIAHHF RMFTIRAWHL 600
TDGFNEKIEN AVDYDMFLKL SEVGKFKHLN KICYNRVLHG DNTSIKKLGI QKKNHFVVVN 660
QSLNRQGITY YNYDEFDDLD ESRKYIFNKT AEYQEEIDIL KDIKIIQNKD AKIAVSIFYP 720
NTLNGLVKKL NNII EYNKNI FVIVLHVDKN HLTPDIKKEI LAFYHKKHQN ILLNNDISYY 780
TSNRLIKTEA HLSNINKLSQ LNLNCEYIIF DNHDSL FVKN DSYAYMKKYD VGMNFSALTH 840
DWIEKIN AHP PFKKLIKTYF NDNDLKSMNV KGASQGMFMT YALAHLLTI I KEVITSCQS 900
IDSVPEYNTE DIWFQFALLI LEKKTGHVFN KTSTLT YMPW ERKLQWTNEQ IESAKRGENI 960
PVNKFIINSI TL 972

<212> Type : PRT

<211> Length : 972

SequenceName : PmHAS Enzyme

SequenceDescription :